

Art Unit: 1714

DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-3 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "combination thereof and mixture thereof" is confusing because it is unclear that the terms "combination" and "mixture" are different or if they are the same. Clarification to the record is requested.

Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is lack of support for the second claim 9 (and its dependent claims) that depends from claim 1 directly that does not provide for a seal.

Claims 12 and 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is lack of support for the second claim 12 (and its dependent claims) that depends from claim 1 directly that does not provide for a seal.

applicant regards as the invention.

There is lack of support for the porous member in claim 13 (and its dependent claims) for the retention member that depends from claim 1 that does not provide for a porous membrane.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is lack of support for a retention member in claim 13 directly and claim 1 indirectly that does not provide for a porous membrane.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 does not provide a further limitation of claim 24 and therefore is indefinite.

The following is a quotation of the pertinent paragraphs of 35 U.S.C. 102 that form the basis for the rejections under the section made in this Office action:

A person shall be entitled to a patent

(b) the inventor, or joint inventor, or sole or joint author, who has conceived or first reduced to practice, in this or a foreign country or in public use or on sale in this or a foreign country, an invention, and who has filed an application for patent in the United States

Claims 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

additive e.g. a surfactant, a preservative, a stabilizer, a thickener, a filter, which is released

into the circulating coolant in the operation of motor vehicles, e. g. including diesel engines, see column 1, lines 3-12.

The container 30 is further defined in Figure 2 having a cylindrical shape or bowl shaped casing 31, inlet and outlet ports 31 and 32, inlets (31) and outlets (32), coolant permeable elements 35, a coating 36, an outer coating that is porous and fuel-permeable, see column 7, lines 36-43, and includes for the SFA to be in particulate form or some other form that would not be in the conventional liquid form, see column 7, lines 44-51.

Hudgens further provides for the inclusion of diffusion elements (72) or diffusion passage or orifice (5), inner element (42) and (43), end plates (46) and (64), a porous membrane referred to as (73) that is porous, lines 71 and (73) that anticipates the instant claimed container and assembly, and other permeable assembly.

The examiner's position is that the prior art directed to an apparatus claim and the permeable of the said claim is not anticipated by the chemical additive. Thus it is the examiner's position that the prior art directed to claims 1 and 10-22 has been considered, but it does not form a basis for rejection.

Although Hudgens recites that the elements are fuel-permeable, it is the examiner's position that the instant claim comprises the same or major base components of the prior art. The instant claim is reasonably expected to be fuel permeable. The instant claim is not a new component of Hudgens

containers, see the prior art, and is not a new component of the instant claims

Claims 1-2, 4, 5, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wright et al. (Wright) 5,860,359.

Wright teaches a cylinder two-part container of plastic material with a fuel inlet and a fuel outlet, a permeable mesh disc, a fuel additive and a pair of magnets wherein fuel passes through the mesh disc, see column 2, lines 26-56 and figures 1-3 that anticipates the instant claims.

Claims 1-2, 4, 5, 20 and 26-27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thunker et al. (Thunker) 5,475,457.

Thunker teaches a device for containing a fuel composition comprising an inlet and a cylindrical body comprising permeable material, see figures 1 and 2 and column 2, lines 12-44 that anticipate the instant claims.

Claims 1-2, 4, 5, 20, 21 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thunker et al. (Thunker) 5,545,217.

Thunker teaches a device comprising an inlet and outlet and a cylindrical body comprising permeable material, see figures 1 and 2, further comprising a cap (5) and plug (6) wherein fuel passes through the permeable material that anticipates the instant claims.

Claims 1-2, 4, 5, 20, 21 and 22 are rejected under 35 U.S.C. 102(b) as being clearly by Beavert et al. (Beavert) 5,475,457.

Beavert teaches a device comprising an inlet, an outlet, a basket

particulate materials that anticipates the instant claims. See figures 1 and 7-8 and column 2.

Claims 1-2, 4-5, 11-12 and 23-24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Brooks et al. (Brooks) # 2,497,717.

Brooks teaches a fuel treating device comprising an inlet, an outlet, screens and particulate material. See figure 1 and column 1-2 that anticipates the instant claims, see figure 1 and columns 1-2.

Claims 1-2, 4-5 and 11-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Arroyo et al. (Arroyo) # 2,973,271.

Arroyo teaches a cylindrical device for treating a fuel comprising an inlet, an outlet, and a metal bar. See figure 1 and column 1, line 43 to column 2, lines 1-68 that anticipates the instant claims.

Claims 1-11, 13-14, 16-17, 19-20 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Makino et al. (Makino) # 2,961,561.

Makino teaches a fuel treating device comprising an inlet, an outlet and particulate material additive. See figure 1 and column 1-2 that anticipates the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejection presented in this document:

35 U.S.C. 103(a) reads: "An invention may be patented notwithstanding whether or not it is previously disclosed or described as set

forth in the
prior art,

provided

This application is examined on the basis of the prior art. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was not commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.55 to point out the inventor's invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 102(b), and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al (Makino) 5,955,531 or Br. Pat. 2,400,028 in view of Hudgens et al (Hudgens) 5,662,778 and Mitchell et al (Mitchell) 5,741,433.

Makino teaches a cylindrical container having an inlet, an outlet and particulate material additive for treating fuel, see figures 1 and 2 and columns 1-2.

Beavans teaches a device comprising a cylindrical container having an inlet, an outlet, a basket comprising particulate material additive for treating fuels, see figures 1 and 7-8 and column 2.

Both, Makino and Beavans teach a method for releasing additives from a bowl-shaped container comprising a porous material comprising at least partially a porous material including a porous permeable filter.

Hudgens teaches bowl shape containers, see figures 1 and 2, fuel permeable element comprising at least partially a sintered seal, or including a porous membrane, or at least including a semi permeable filter membrane, see column 5, lines 36-65, with a SEA material disposed within the container, see column 5, lines 58-60, that includes phosphate/molybdenum material, see column 5, lines 61-65.

Mitchell teaches a method for increasing the release supplemental coolant additives (SCA) that includes the alkali metals in the form of granular or particulate form, see column 4, lines 26-27.

It would be obvious to the artisan to adapt to use the bowl-shaped container of Hudgens as a substitute for the cylindrical container of Makino or Beavans. It is the position of the examiner that the shape of the container does not lend patentability properties to the container in the absence of evidence of record to the contrary.

It would be obvious to the artisan to adapt to prepare and use the fuel permeable element of the primary reference in the fuel elements of Makino and Beavans because the fuel elements of the primary reference have the same composition and the fuel elements of the secondary reference are adapted for the use of the fuel of the primary references.

The prior art does not appear to teach seal assemblies, containers, seal assemblies and methods comprising slow release of


communications from the

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308-2518. The examiner can normally be reached on Monday-Friday from 7:30am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Rajanathan, can be reached at 703-306-2777. The fax phone number for the office where this case or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature related to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


MARGARET MEDLEY
REGISTERED EXAMINER

M.B. Meldey/om
December 11, 2009